

1 Claims:

2 1. A process for making superconducting material useful for forming electrolytic
3 devices comprising the steps of:

4 a) establishing multiple niobium or tantalum components in a primary billet
5 of a ductile material;

6 b) working the primary billet to a series of reduction steps to form said
7 niobium or tantalum components into elongated elements;

8 c) cutting and restacking the elongated elements from step d) around a metal
9 core and surrounding the stack with a porous confining layer to form a secondary billet;

10 d) working the secondary billet from step c) through a series of reduction
11 steps; including twisting and rolling into thin ribbon with an Aspect Ratio of greater than
12 5:1;

13 e) cutting the elongated billet from step d) into sections; and

14 f) leaching the core and sheath at least in part.

15 2. The process of claim 1, wherein said leaching is in an acid leach.

16 3. The process of claim 1, wherein said leaching step is in a liquid metal bath.

17 4. The process of claim 3, wherein said liquid metal bath comprises molten
18 magnesium.

19 5. The process of claim 1, wherein said porous confining layer contains a gap that
20 renders it circumferentially discontinuous, but overlapping.

21 6. The process of claim 1, wherein said porous confining layer contains a gap that
22 renders it circumferentially discontinuous.

1 7. The process of claim 1, wherein several separate segments are used to construct a
2 multi anode capacitor assembly.

3 8. An electronic device made from the superconductor material formed by the
4 process of claim 1.

5 9. An electrolytic capacitor made from the superconductor material formed by the
6 process of claim 1.

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